Testimony of
Thomas A. Burke, Ph.D., M.P.H.
Professor of Health Policy and Management
Johns Hopkins University
Bloomberg School of Public Health
Baltimore, Maryland

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Health Tracking: Improving Surveillance of Chronic Conditions and Potential Links to Environmental Exposures

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Mr. Chairman, and Members of the Committee, I want to thank you for the opportunity to speak with you today. I am Dr. Tom Burke, Professor of Health Policy and Management at the Johns Hopkins Bloomberg School of Public Health and Co-Director of the School's Risk Sciences and Public Policy Institute. I am a member of the National Academy of Sciences Board on Environmental Studies and Toxicology and serve as the Chairman of the Advisory Committee to the Director of the CDC National Center for Environmental Health. Perhaps most germane to today's hearing, I also served in the public health trenches as both an environmental regulator and State health official for over 13 years in my native State, New Jersey.

I would like to focus on five key aspects of environmental health tracking today:

- Responding to community concerns about exposure and disease
- Bridging the "great divide" between environmental protection and public health
- Strengthening the scientific basis for our national environmental policies
- Training the future public health and environmental leaders
- Seizing the opportunities of the unprecedented investment in public health in response to terrorism

1. Community Response

Truth be told, we know remarkably little about the health of our communities. Basic information about the incidence of disease and disability is unavailable. As both a public official and research I have worked with communities from Texas to Cape Cod that are concerned about environmental contamination and the impacts on their health. All too often the regulatory response to health concerns is to drill monitoring wells and contain pollution in place. This does little to address community concerns about chronic health impacts. Support for community health assessments has been unavailable or inadequate, and public health officials are often unable to respond to community concerns. Environmental health tracking is essential for addressing the unanswered questions about the role of the environment in a wide range chronic, reproductive, and developmental health impacts.

2. The Great Divide

Throughout the 1970's and 1980's the passage of environmental laws resulted in unprecedented environmental improvements and the establishment of an elaborate federal and state infrastructure of new agencies for enforcement of these regulations. Although the fundamental goal of these environmental laws is the protection of public health, these same statutes failed to support the core functions of environmental health including health tracking. Particularly at the state level, public health agencies faced diminished authority and resources and grew detached form environmental decision making. As the

environmental regulatory infrastructure grew, public health agencies failed to keep pace and critical questions about health and the environment have gone unanswered.

Environmental health tracking will provide a bridge across the divide. Effective tracking will bring together environmental protection efforts to characterize and control sources with public health driven surveillance of exposure and health effects. Support for tracking will also provide much needed support for the public health infrastructure, enabling more active participation in environmental decision making.

3. Strengthening the Scientific Basis for Environmental Policies

Since the regulatory reform efforts of the 104th Congress there have been growing concerns regarding the scientific basis for many environmental policies. Are the health based standards within these polices based upon "sound science"? Are these policies effective in protecting public health? Are the costs justified? Through my activities with the National Academy of Sciences I have been directly involved in evaluating the scientific basis of several of the most controversial environmental policies. Many past risk based policies were often dependent upon animal experiments and risk assessments with large uncertainties. We have become increasingly dependent upon studies of human populations to guide our prevention strategies. The examples of mercury, arsenic, and air particulates underscore the need for improved information on actual population exposure and improved disease tracking. Tracking data will help reduce these uncertainties that surround these issues, providing an improved scientific basis for decisions and a sounder public health basis for our national environmental priorities.

4. Training the Future Leaders

The scientific, management, political, and communication challenges of public health continue to grow. In a national meeting of environmental health leaders convened by Johns Hopkins, the need for improved training and education was recognized as a top priority for the revitalization of the public health infrastructure. The success of environmental tracking efforts will ultimately depend upon the talents of those who use and interpret the information and apply it to address the nation's environmental health needs. Current funding for environmental health education is woefully inadequate to address our growing national needs. There is a critical need to develop a pipeline for future environmental health leaders. This pipeline will depend upon creative partnerships between agencies and the Schools of Public Health, and support for attracting the best and brightest students to this increasingly complex field.

5. Unprecedented Opportunity for Revitalizing Public Health

There has never been a greater opportunity to rethink and rebuild our national public health infrastructure. The events of September 11 and the subsequent anthrax outbreak

have underscored the importance of a strong public health system. We are currently witnessing unprecedented investment in our national public health capacity, including a revitalization of state and local public health agencies. Much of the capacity building that we are undertaking to improve preparedness includes improved capacity for community health surveillance, environmental threat assessment, and management of environmental consequences of biological, chemical, and radiological threats. These improvements in capacity can provide enormous collateral benefits for environmental health. The integration of environmental health tracking with the current preparedness efforts can provide efficiencies of design and implementation, and result in sustained public health benefits well beyond the pressing immediate needs for terrorism response.

In conclusion, I want to emphasize that tracking the health of our communities is a cornerstone of effective public health. Our failure to invest in this core function has eroded our public health infrastructure, undermined the scientific basis and credibility of our environmental laws, impeded our progress in understanding and preventing disease, and left us unable to respond to the health concerns of our communities. The development of a national approach to health tracking has far reaching potential to improve public health and the quality of our environment. Development of a national environmental health tracking network may have public health impacts far beyond those of any individual environmental statute. The applications for research, prevention, and response are far reaching and will redefine the basic practice of public health. From the regulation of community drinking water, to the evaluation of the long-term health impacts of the World Trade Center attack, improved tracking of exposures and health outcomes is essential to safeguarding our nation's health.